

SYSTEMS AND METHODS FOR MONITORING CHEMICAL AND BIOLOGICAL
ACTIVITIES USING DIFFERENTIAL MEASUREMENTS

ABSTRACT OF THE INVENTION

[0091] A system operable to monitoring bio/chemical activities includes a first measurement probe, a second measurement probe and a comparator. The first measurement probe is operable to interrogate one or more physical properties of a sample at a first location of the sample, and to output, in response, a first measurement signal. The second measurement probe is operable to interrogate one or more physical properties of the sample at a second location of the sample, and to output, in response, a second measurement signal. The comparator is coupled to receive the first and second measurement signals, the comparator configured to output a difference signal comprising the difference between the first and second measurement signals, the difference signal corresponding to the difference in one or more bio/chemical activities occurring at the first location of the sample relative to the second location of the sample.